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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,798	08/11/2000	Andre van Doorn	142-327P	9236
2292	7590	11/23/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NGUYEN, THINH H	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/635,798	<b>Applicant(s)</b> VAN DOORN ET AL.	
	<b>Examiner</b> Thinh H Nguyen	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to:
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. Applicant's amendment filed April 22, 2004 have been fully considered as noted in the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hackleman. (U.S.5,640,183)

Hackleman (see col.3, line 35 – col. 4) discloses the instant claimed printing method and device containing at least one printhead 14 provided with at least one row of nozzles 16 having nozzle spaced at 1/300-inch. The pixel row being formed at 300 dpi which resolution being equal to the resolution of the pixel column (nozzle pitch). Means for initiating a first printing stage in which a strip of pixel row(s) 2 through +1 (col.4, line 15), said printhead being displaced in a direction parallel to the pixels columns, means initiating a second printing stage in which a strip of pixel row(s) 3 through +2 (see carriage and paper feed controlling of Hickman reference of which incorporated herein by Hackleman, col.2) initiating a second printing stage in which the

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strip is provided with supplementary ink drops, wherein the print head is displaced over a distance which is not selected from a plurality of distances but which is a fixed distance such that the same is always substantially equal to the width of one pixel row. (according to Hickman col.5, lines 1-23, the one pixel row width can be selected as any non-random value e.g., 0, 1, 2, ..., n. As best understood, the one pixel row width according to one step paper drive remained fixed until the completion of the printing page once the choice is selected) such that the same is substantially equal to the width of one pixel row.

Re claim 2, the limitation of the one extra nozzle is shown by the +/- nozzle(s) (see fig.5).

Re claims 3, 4, the limitation is shown by nozzle rows being used to print a pixel in the first and second printing stage are from different sets of nozzles of the same printhead or different printheads 16 (fig.4; see also col.3, lines 64 – col.4, line 18).

Re claim 5, the limitation of substantially each pixel is printed with no more than one ink drop is shown in col.3, lines 51-54.

### ***Response to Amendment***

Applicant's Amendment filed September 8, 2004 has been entered and carefully considered. However, arguments with respect to claims 1-6 are not deemed to be persuasive.

Applicant contends (pages 3 and 4) that Hackleman failed to teach displacement remain fixed during all subsequent swaths in the printing of a page because for each new pass a new set of nozzles is selected.

The Examiner disagreed with this contention.

As best understood, Hackleman (abstract, line 5; col.5, lines 3-5, lines 16-20) within the scope of his invention defined displacement (paper drive) is fixed when a swath is printed in normal mode (i.e., 0 offset) non-overlap or to have an offset by "n" dots. The offset in this case remains to be fixed swath after swath with the choice selected to complete the page as necessary. Or in random offset mode where the new set of nozzle or paper drive is randomly selected before each scan.

In view of the foregoing reasons, the examiner asserts that all limitations have been properly evaluated and that the rejection as applied remains proper.

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

***Contact Information***

Any inquiry concerning this communication should be directed to examiner  
Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be

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reached Mon-Wed, Thursday from 9:00A – 5:00P. The official fax phone number for the organization is (703) 872-9306.

The examiner supervisor, Dave Talbott, can also be reached at (571) 272-1934.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Tinh Nguyen

November 18, 2004

**Tinh Nguyen**  
**Primary Examiner**  
**Technology Center 2800**